TENNESSEE DEPARTMENT OF AGRICULTURE
Water Resources Program

May 16, 2011

Ms. Erin O'Brien
TDEC
L&C Annex, 6th Floor
Nashville, Tennessee 37243

Dear Ms. O'Brien:

I am writing to inform you that I have reviewed the application and Nutrient Management Plan (NMP) for CAFO permit for Garnett M. Cherry, Cherry's Rooster, in Whitleyville, Tennessee (previous NPDES Permit NO. TN000088).

This letter is to confirm that the TDA has reviewed and approved the NMP. I have enclosed a copy of the Nutrient Management Plan Requirements form and the original signed and dated Notice of Intent (NOI) form, Addendum to Nutrient Management Plan, Closure Plan, and stamped Approval Stamp form for your review and final approval.

Sincerely,

Angela L. Warden
CAFO Specialist

: //enclosures

ec:// Garnett Cherry, Owner Cherry's Rooster

Ellington Agricultural Center
440 Hogan Road
Nashville, TN 37220
Telephone: 615-837-5492 Fax: 615-837-5025

TENNESSEE DEPARTMENT OF AGRICULTURE

Water Resources Program

The following individual has submitted all required elements of an NMP/CNMP as required to obtain a CAFO permit. Their Nutrient Management Plan (or CNMP) has been reviewed and approved by this office.

Name of Owner/Operator: Garnett M. Cherry

Operation Name: Cherry's Rooster

Address of Operation: 137 Crabtree Creek Rd. Whitleyville, TN 38588

Phone Number: (615) 699-3542 County: Clay

Date application was initiated:

RECEIVED
MAY 16 2011

Date approval forwarded to TDEC:

MAY 16 2011

NMP/CNMP Approval Date:

~~THE APPROVAL SHALL NOT BE~~
CONSTRUED AS CREATING
A PRESUMPTION OF CORRECT

MAY 16 2011

OPERATION OR AS WARRANTING
THAT THE APPROVED FACILITIES
WILL REACH THE DESIGNED GOALS

Date approval received by TDEC

RECEIVED
MAY 18 2011
TN Division Of Water
Pollution Control

TDA Reviewer's Name: Angela Warden

TDA Reviewer's Signature: Angela J. Warden 5/16/11
Date

Garnett M. Curry
Curry's Rooster Whitleyville, TN
5/16/11
Clay Co. TN

Nutrient Management Plan Requirements

The following 9 items need to be submitted at the time the permit is applied for. Additional record-keeping items as outlined in the CAFO rules are also considered part of the nutrient management plan and must be kept on-site. More information on each item can be found in the CAFO rule (1200-4-5-.14).

1. **Two maps: (1.)** A map of your farm showing location of any animal barns/houses, compost bins, litter storage bins, manure lagoons/holding ponds, nearby roads, fields to which litter/manure will be applied, and non-application buffer areas around any bodies of water (streams, creeks, rivers, ponds, wells, sinkholes, springs, wetlands, etc.). A hand-drawn map is acceptable and even preferred. **(2.)** A topographic map of the farm (1:24000 scale, showing 1-mile radius from farm) showing property lines.
2. **Nutrient budget** – this is basically a balance sheet of all manure produced on the farm and all manure spread on the farm or removed from the farm. Application rates for all fields should be based on crop needs, realistic crop yield expectations, and actual manure analyses of nutrient content.
3. **Soil test results** for phosphorus and potassium for each application field. These must be taken at a minimum of every five years.
4. Results of **manure analysis** from within the past year. Annual manure testing is a requirement for all CAFOs. These results must be included with initial permit application if the farm is in operation. If the farm that is applying for the permit is new and not yet operating, then manure testing results need to be obtained once operation begins. At that point, the manure test results and revised application rates need to be submitted to TDA. Manure test results in subsequent years need to be kept as part of your record-keeping activities.
5. Results of the **Phosphorus Index** applied to each field that has a soil test P value of "High" or "Very High". In those situations, this tool will determine whether your application rates will be based on nitrogen or phosphorus.
6. Statement regarding method of **dead animal disposal**.
7. **Closure Plan** to be implemented in the event animal production ceases on the site.

These last two items are only required for medium-size CAFOs that manage **liquid manure**.

8. Documentation of **design of liquid waste handling system**. This should include, but is not limited to: volume for solids accumulation, design treatment volume, total design volume, the approximate number of days of storage capacity, pumping and routing of wastes, and any solid separation process. Ideally, this documentation would consist of the pertinent engineering drawings with accompanying descriptive narrative.
9. The construction, modification, repair, or installation of any portion of a CAFO liquid waste handling system (such as earthen holding pond, treatment lagoon, pit, sump or other earthen storage/containment structure) after April 13, 2006 must be preceded by a thorough **subsurface investigation**. This investigation will include a detailed soils investigation with special attention to the water table depth and seepage potential.

In addition to the items above, the following form(s) must accompany your application:

- ***Notice of Intent* form** must be submitted with all applications from Class II (Medium) CAFOs

OR

- **EPA Forms 1 and 2B** must be submitted with all applications from Class I (Large) CAFOs.
- **Addendum to Nutrient Management Plan**.

Tenn e Department of Environment and Conse ion,
Division of Water Pollution Control
401 Church Street, 6th Floor L & C Annex, Nashville, TN 37243
(615) 532-0625

CONCENTRATED ANIMAL FEEDING OPERATION (CAFO) STATE OPERATING PERMIT (SOP) APPLICATION

Type of permit you are requesting: ☐ SOPCD0000 (designed to discharge) ☑ SOPC00000 (no discharge) ☐ Unknown, please advise

Application type: ☐ New Permit ☐ Permit Reissuance ☐ Permit Modification

If this NOI is submitted for Permit Modification or Reissuance provide the existing permit tracking number: ____

OPERATION IDENTIFICATION

Operation Name: Cherry's Rooster	County: Clay ~~Fentress~~
Operation Location/ Physical Address: 137 Crabtree ck Rd Whitleyville TN 38588	Latitude: 36.508056
	Longitude: 85.741389
Name and distance to nearest receiving water(s): 1000 ft Pine Lick ck	
If any other State or Federal Water/Wastewater Permits have been obtained for this site, list those permit numbers: None	
Animal Type: ☑ Poultry ☐ Swine ☐ Dairy ☐ Beef ☐ Other ____	
Number of Animals: ~~40000~~ 44000 Number of Barns: 2 Name of Integrator: Equity Group	
Type of Animal Waste Management: (check all that apply) ☒ Dry ☐ Liquid ☐ Liquid, Closed System (i.e. covered tank, under barn pit, etc.)	
Attach the NMP ☒ NMP Attached Attach the closure plan ☒ Closure Plan Attached Attach a topographic map ☒ Map Attached	

PERMITTEE IDENTIFICATION

Official Contact (applicant): Garnett M. Cherry	Title or Position: Owner			
Mailing Address: 137 Crabtree ck Rd	City: Whitleyville	State: TN	Zip: 38588	☒ Correspondence ☒ Invoice
Phone number(s): 615-699-3942	E-mail: ONJKas@gmail.com			
Optional Contact:	Title or Position:			
Address:	City:	State:	Zip:	☐ Correspondence ☐ Invoice
Phone number(s):	E-mail:			

APPLICATION CERTIFICATION AND SIGNATURE (must be signed in accordance with the requirements of Rule 1200-4-5-.05)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and title; print or type	Signature	Date
Garnett M. Cherry	Garnett M. Cherry	4-18-2011

STATE USE ONLY

Received Date	Reviewer	EFO	T & E Aquatic Fauna	Tracking No.
RECEIVED MAY 18 2011	Impaired Receiving Stream	High Quality Water		NOC Date

RECEIVED
MAY 16 2011
TN Division Of Water Pollution Control

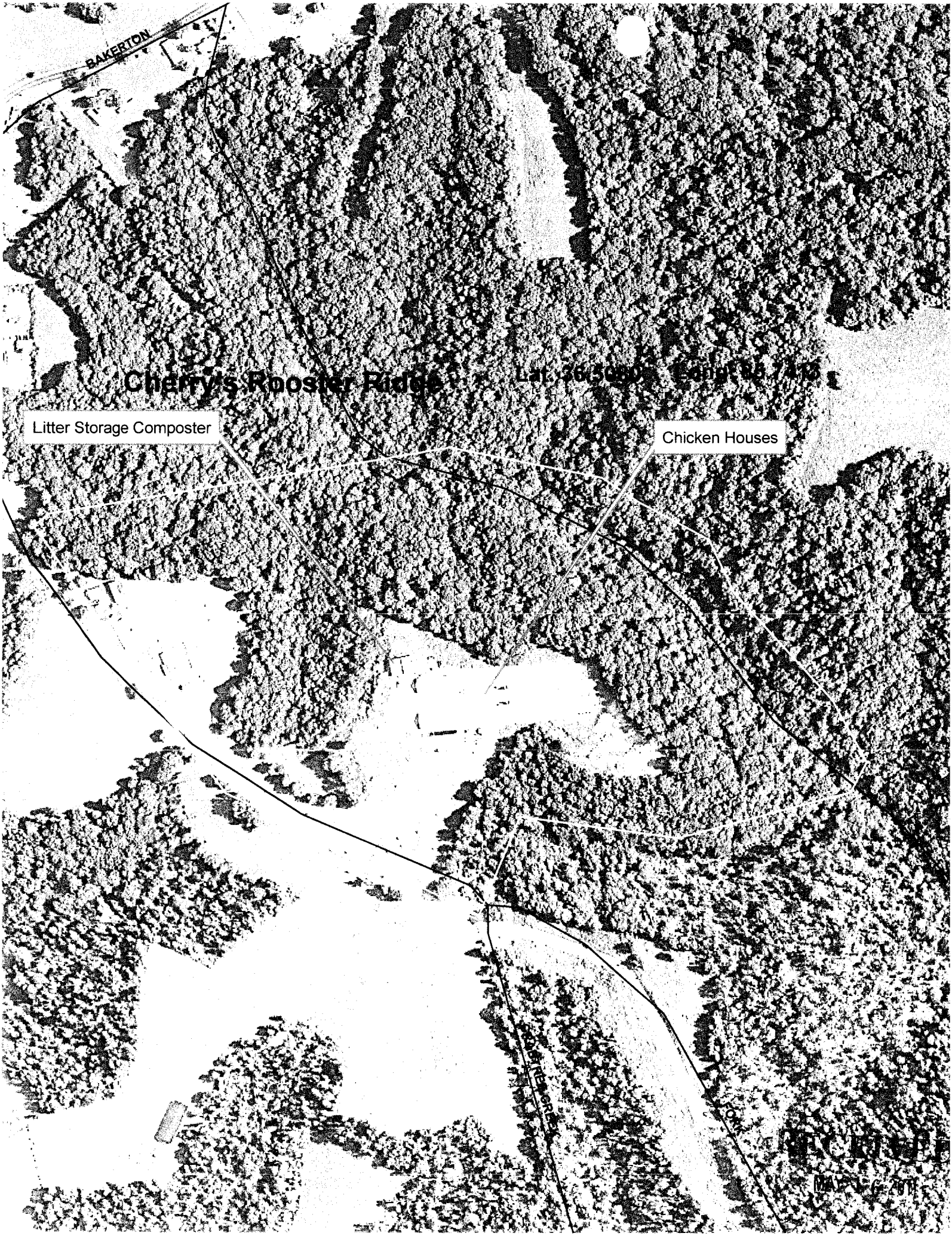
Addendum to Nutrient Management Plan:

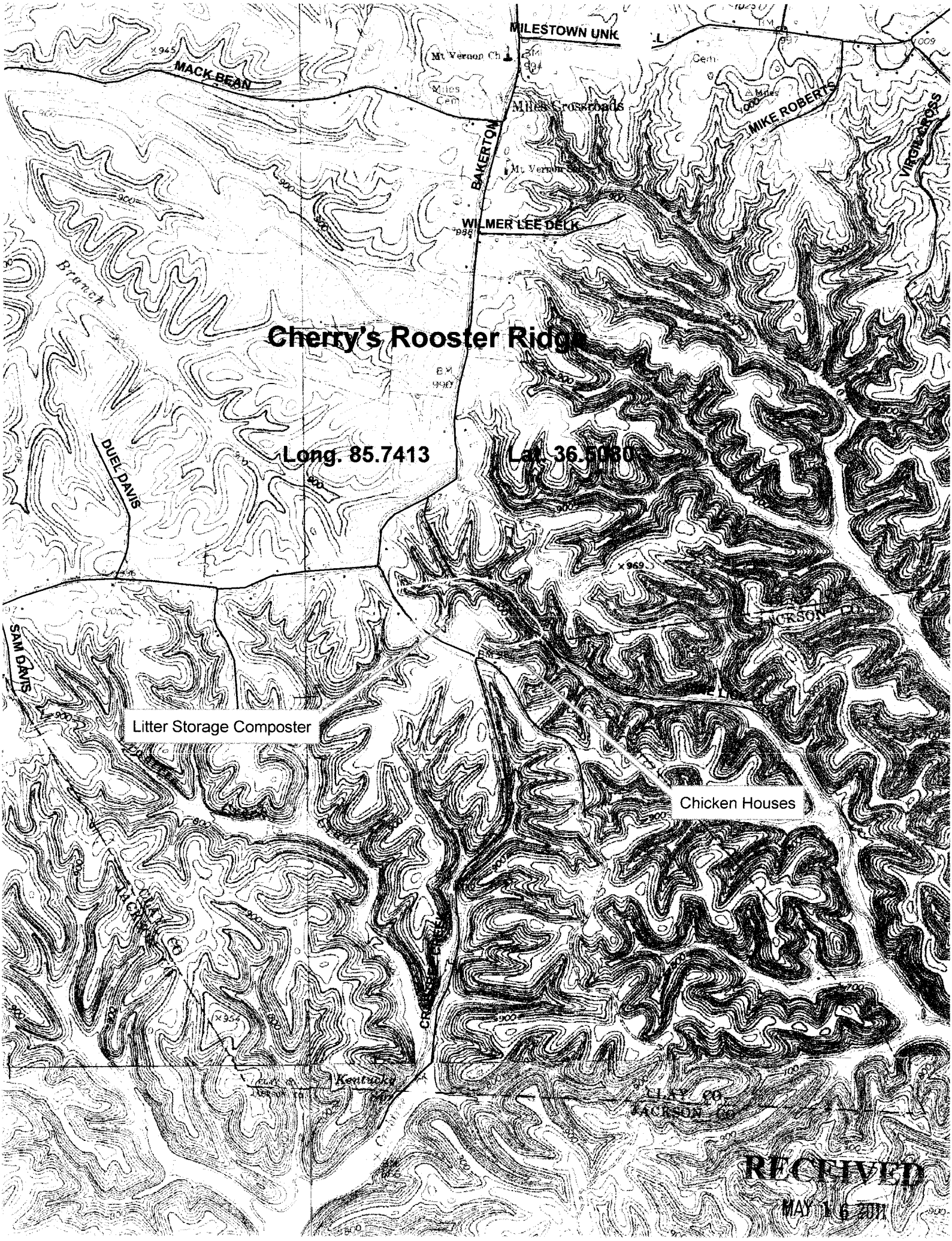
By approval of this plan, I affirm that I have read, understand, and will comply with the following stipulations from Tennessee's CAFO rule (1200-4-5-.14) that apply to my CAFO operation.

1. All clean water (including rainfall) is diverted, as appropriate, from the production area.
2. All animals in confinement are prevented from coming in direct contact with waters of the state.
3. All chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants.
4. All sampling of soil and manure/litter is conducted according to protocols developed by UT Extension.
5. All records outlined in 1200-4-5-.14(16) d-f will be maintained and available on-site.
6. Any confinement buildings, waste/wastewater handling or treatment systems, lagoons, holding ponds, and any other agricultural waste containment/treatment structures constructed after April 13, 2006 are or will be located in accordance with NRCS Conservation Practice Standard 313.
7. Drystacks of manure or stockpiles of litter are always kept covered under roof or tarps.
8. An *Annual Report* will be written for my operation and submitted between January 1 and February 15 of each year. It will include all information required by rule [1200-4-5-.14(16)g].

Signature: Garrett M. Cheney

Date: 4-18-2011


BAKERTON
Cherry's Rooster Ridge
Lat 36.5080
Long 96.7413
Litter Storage Composter
Chicken Houses
ROBINSON CREEK
FOWLER



RECEIVED
MAY 16 2011

N ient Management Plan - Pc ry

For Use by Farms

Exporting 100% of Litter Generated

1. Farmer/ Producer Information

Is **ALL** Litter Hauled Offsite* | Yes | No

Please circle one

**If the answer is "No," do not complete this form.*

First Name:	Garnett
Last Name:	Cherry
Farm/ Operation Name:	Cherry's Rooster Ridge
Tennessee County:	Clay

2. Volumes and Calculations

Poultry Type: | Broiler | Pullet | Layer

circle the type(s)

Key

Key		
A	**Number of birds per house per grow-out:**	22000
B	**Number of Houses:**	2
C	**Number of Grow-Outs / Year:**	5.5
D	**Average Weight of Litter Produced (lbs.)/ Bird / Grow-Out *(see Table at right or use your farm average if known)***	2.4

The amount of litter removed from a poultry house will vary depending on the litter moisture content, type and size of birds, and length of time birds are kept in house. Below is a Table summarized from the NRCS Poultry System Calculator V10.0 to assist in placing the litter amount produced per bird and assist in litter calculations.

Type of Bird	Market/ Mature Weight (lbs)	Avg. Weight of Litter Produced (lbs)/ Bird / Grow-Out
Broilers	small (3.8 - 5 .8)	2.1
	large (5.9 - 7+)	2.4
Layer	8 - 12	8
Pullet	5.5	3

*Take **Bolded** Letters in **Key** Column Above and Below to Assist in Calculating Values Below*

Number of Birds per Grow-Out = A x B = 44000

Number of Birds Example: If A = 22,000 and B= 2 and C= 5.5 then:

22,000 X 2 = 44,000 number of birds

RECEIVED

MAY 18 2011

TN Division Of Water Pollution Control

KEY

E **Number of Birds per Year** = A x B x C = 242000

Number of Birds per Year Example: If A = 22,000 and B= 2 and C = 5.5 then:

22,000 x 2 x 5.5 =242,000 number of birds per year

Total Tons of Litter Produced per Year on the Farm = E x D / 2,000 = 290.4

Tons of Litter Produced Example: If E = 242,000 and D = 2.1 lbs. then:

242,000 x 2.1 lbs = 508,200 lbs. / 2,000 = 254 Tons

Tons of Litter Exported from Farm / Year 290.4

RECEIVED

MAY 16 2011

3/31

N ient Management Plan - Pc ry

For Use by Farms

Exporting 100% of Litter Generated

3. Litter Handling and Storage

Litter Contents from Manure Analysis

Laboratory Name	House	Date of Analysis	Total N	P_2O_5[a]	K_2O[b]	Units
A&L	Litter Stora	4/28/2011	16.4	73.1	47.5	lbs./Ton
						lbs./Ton
						lbs./Ton

I will get an annual manure analysis and provide the results to all parties which are given or purchase litter from my farm or operation.

Garrett M. Cheney 5/12/11

Signature / Date Signed

Mortality Management

Dead birds will be disposed of according to State and local laws in a way that does not adversely affect groundwater or create public health concern. All mortalities will be disposed of using:

Composting	Incineration	Other:
please circle one		

G.M.C.
initials

Closure Plan

RECEIVED
MAY 18 2011
TN Division Of Water Pollution Control

In the event that poultry production at this location ceases, the following will be done within 360 days:

- Any litter/ compost currently in storage at the time of closure will be removed and spread elsewhere according to my current NMP.
- All litter in houses will be removed and spread elsewhere according to my current NMP.
- The most current manure analysis performed by an accredited laboratory will be provided to anyone removing litter on my farm.
- Any dead birds in the houses at the time of closure will be disposed of according to my NMP.

5/12/11

Signature that I have read and agree to this Closure Plan / Date signed

Garrett M. Cheney

Notes:

N = Nitrogen P_2O_5 = Phosphorus Oxide K_2O = Potassium Oxide

[a]If Phosphorus is expressed in analyses as Phosphorus (P), simply multiple P lbs. X 2.3 to convert to P_2O_5.

[b]If Potassium is expressed in analyses as Potassium (K), simply multiple K lbs. X 1.2 to convert to K_2O.

RECEIVED
MAY 16 2011

N ient Management Plan - Po ry

For Use by Farms

Exporting 100% of Litter Generated

4. Checklist

Use this sheet to help ensure that you have included all required items in order for your CAFO application and Nutrient Management Plan to be approved.

✓ **Forms**

- ✓ Signed revised Notice of Intent Form
- ✓ Signed Addendum to Nutrient Management Plan

✓ **Maps**

- ✓ Map of Farm/ Operation Showing the Location of Barns/ Houses, Compost Bins, Litter Storage Bins, Nearby Roads, Streams, Wetlands, etc.
- ✓ Topographical map of the Farm/ Operation showing property lines and location of poultry houses.

✓ **Calculations and Volumes**

- ✓ Number of Birds per House
- ✓ Total Number of Birds per Year
- ✓ Number of Houses
- ✓ Number of Grow-Outs Each Year
- ✓ Average Weight of Birds
- ✓ Tons of Litter Produced Per Year

RECEIVED
MAY 18 2011
TN Division Of Water Pollution Control

✓ **Manure Analysis / Mortality Disposal**

- ✓ Annual Manure Analysis Performed by an Accredited Laboratory
- ✓ Statement Regarding Dead Animal Disposal / Mortality Management*

**If rendering is method listed, make sure to include the name and address of the renderer in the notes area at the bottom of this sheet.*

Notes: This operation will use composting for normal mortality and burial for catastrophic mortality. See Soil Map for burial site

RECEIVED
MAY 16 2011

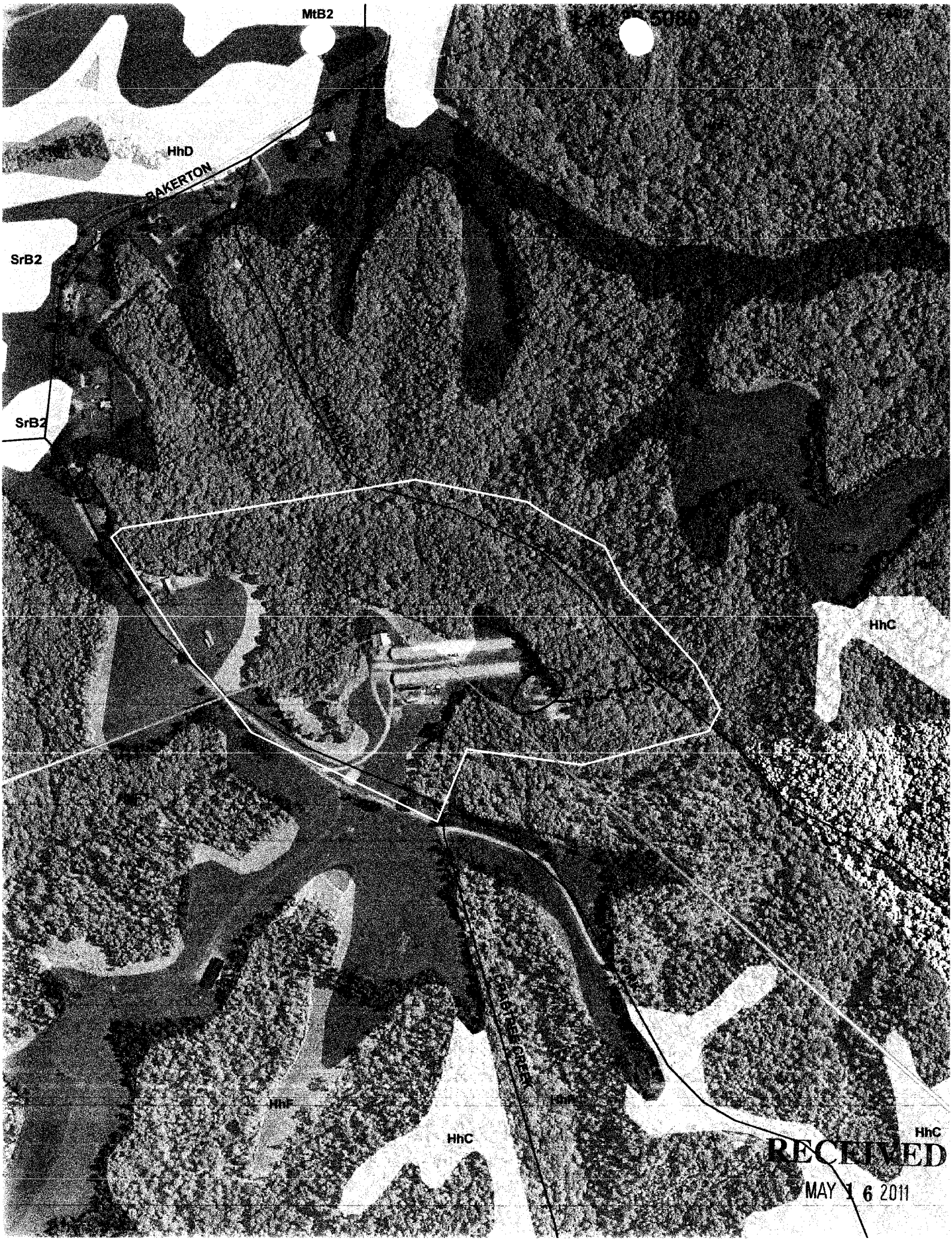
The following table describes how you plan to manage catastrophic loss of animals in a manner that protects surface and ground water quality. You must follow all national, state and local laws, regulations and guidelines that protect soil, water, air, plants, animals and human health.

Burial will be used for catastrophic poultry and beef cow mortality.

BURIAL-- Dig a large pit or trench as located on the plan map. Insert dead animals daily, and cover them with one to two feet of soil. The pit should be graded so that it does not impound water. Runoff from the pit should flow into a grass filter. Note: When adequate drainage is not provided, these pits or trenches fill with water and carcasses may actually float to the surface. The water in the pit is very bacteria-laden and may be a hazard to both animal and human health. There is also high potential for ground water contamination from both bacteria and nutrients.
Burial trenches and pits must have at least a 2.0-foot separation between the bottom of the trench and groundwater. The pits should also have a berm to divert rainfall and runoff from the site. The soil should be able to infiltrate any rainfall that falls directly into the pit.
Vectors (dogs, rats, snakes, flies, etc.) are potential problems in a burial situation. Carcasses must be covered daily as to reduce vectors in and around the trench or pit.
When the burial pit is full, the site will be capped with a mound of soil so that precipitation is not allowed to collect in the closed pit. Also, the area will be grassed as to prevent erosion. The burial area will be monitored so that these conditions remain after settling of decomposing carcasses and capping material.

Important! In the event of catastrophic animal mortality, contact the following authority before beginning carcass disposal:

Authority name APHIS
Contact name Phillip Gordon
Phone number 615-781-5310



Large Animal Carcass Disposal

Clay County, Tennessee

[Onsite investigation may be needed to validate the interpretations in this table and to confirm the identity of the soil on a given site. The numbers in the value columns range from 0.01 to 1.00. The larger the value, the greater the potential limitation. The table shows only the top five limitations for any given soil. The soil may have additional limitations]

Map symbol and soil name	Pct. of map unit	Large Animal Carcass Disposal, Pit		Large Animal Carcass Disposal, Trench	
		Rating class and limiting features	Value	Rating class and limiting features	Value
SrC2:					
Sugargrove, eroded	85	Very limited		Very limited	
		Depth to bedrock	1.00	Depth to bedrock	1.00
		Slope	0.63	Seepage, porous bedrock	0.50
		Seepage, porous bedrock	0.50	Seepage	0.22
		Seepage	0.22	Slope	0.04
		Clay content	0.01	Clay content	0.01

www.allabs.com

A&L Analytical Laboratories, Inc.

2790 Whitten Rd. Memphis, TN 38133 (901) 213-2400 Fax (901) 213-2440

LAND APPLICATION ANALYSIS

Client :
GARNETT M. CHERRY

137 CRABTREE CK RD

WHITLEYVILLE , TN 38588

Grower :
Analytical Testing

PO :

Report No: 11-111-0276
Cust No: 11103
Date Printed: 04/28/2011
Date Recd : 4/21/2011

Page : 1 of 1

Lab Number : 95882 **Sample Id :** 1

Test	Analysis		Pounds Per Ton	
	As Received	Dry Basis	As Received	Dry Basis
Nitrogen, N %	0.822	1.04	16.4	20.8
Ammoniacal-N				
Phosphorus, P %	1.59	2.01	73.1 P_2O_5	92.5
Potassium, K %	1.98	2.50	47.5 K_2O	60.1
Sulfur, S %	0.86	1.08	17.2	21.7
Magnesium, Mg %	0.59	0.74	11.8	14.9
Calcium, Ca %	2.74	3.46	54.8	69.3
Sodium, Na ppm	7670	9700	15.3	19.4
Iron, Fe ppm	2350	2970	4.70	5.94
Aluminum, Al ppm	1250	1580	2.50	3.16
Manganese, Mn ppm	469	593	0.93	1.18
Copper, Cu ppm	56.4	71.3	0.11	0.14
Zinc, Zn ppm	396	501	0.79	1.00
Boron, B ppm	61.8	78.1	0.12	0.15

Test	Result
Moisture %	20.9
Solid %	79.1

Additional Information	Result
Type	Dry Basis

Comments :

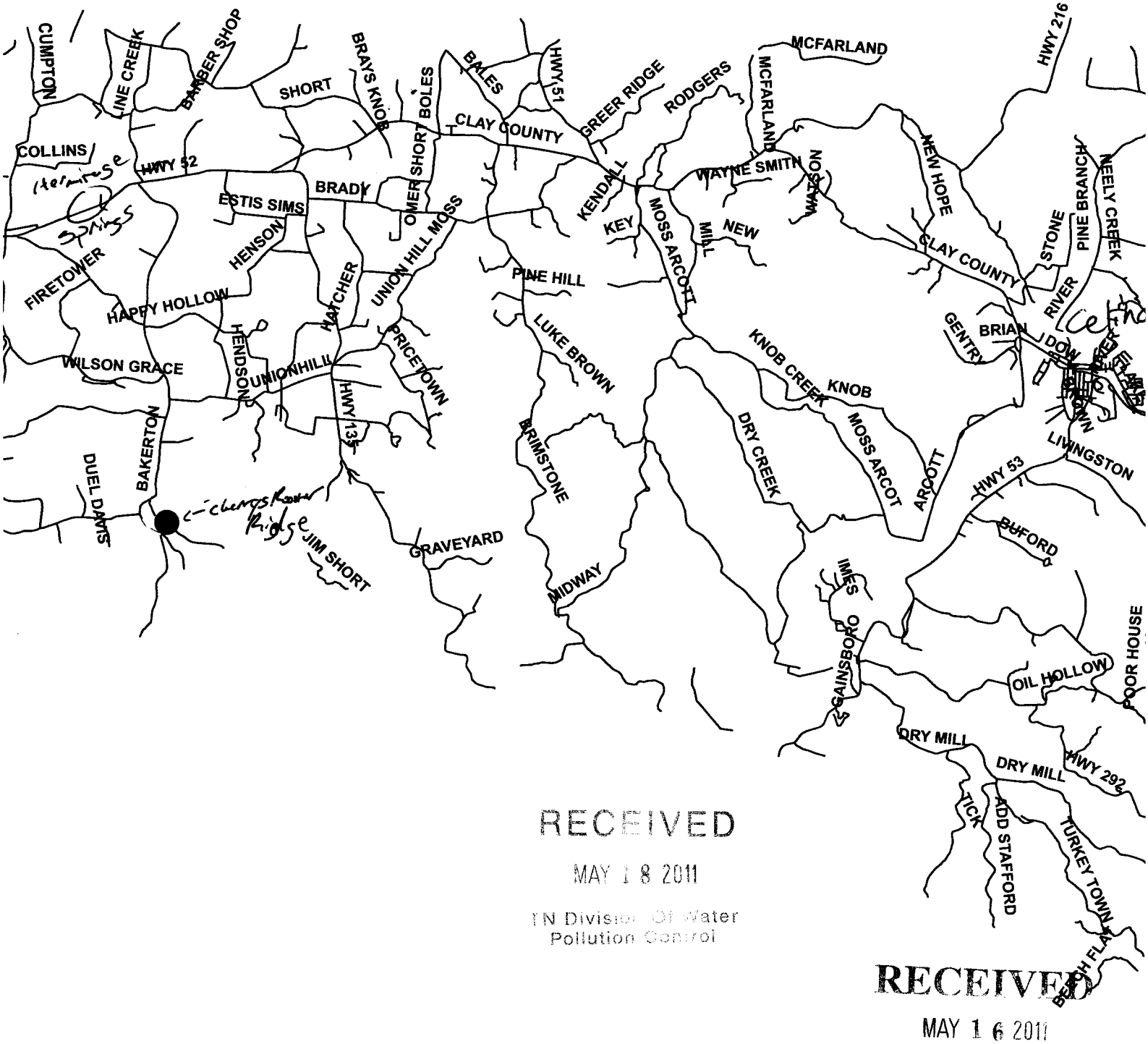
RMMA Recommended Methods of Manure Analysis, Peters et al, 2002, In Press

SW USEPA, SW-846, Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, 3rd Ed. Current Revision

RECEIVED
MAY 18 2011
TN Division Of Water Pollution Control

Oscar Ruiz

RECEIVED
MAY 16 2011



RECEIVED

MAY 18 2011

TN Division Of Water
Pollution Control

RECEIVED

MAY 16 2011